

AMENDMENTS TO THE CLAIMS

No amendments are made to the claims except to cancel claim 16.

Claim 1 (original):

A method for counteracting a transmission line parasitic element discontinuity,
2 comprising:

4 determining a value of a parasitic element, be it a capacitive or an inductive
parasitic element, that exists at a portion of a signal transmission line which has
6 an impedance;

8 calculating a delay associated with a correction impedance of a correction
transmission line that, based at least in part on the parasitic element value and the
10 correction impedance of the correction transmission line, is operative to increase
the signal transmission line impedance if the parasitic element is capacitive and
12 to decrease the signal transmission line impedance if the parasitic element is
inductive; and

14 adding the correction transmission line to the portion of the signal transmission
16 line at which the parasitic element exists.

Claim 2 (original):

The method of claim 1, wherein the correction transmission line is divided equally and
2 each half-part thereof is applied to the signal transmission line.

Claim 3 (original):

The method of claim 2, wherein the half-parts of the correction transmission line are
2 added one before and one after the parasitic element.

Claim 4 (original):

The method of claim 1, wherein the added correction transmission line counteracts the effects of the parasitic element.

Claim 5 (original):

The method of claim 1, wherein the correction transmission line causes the impedance of the correction transmission line to match the impedance of the signal transmission line.

Claim 6 (original):

The method of claim 1, wherein the parasitic element includes a via.

Claim 7 (original):

A method for enhancing the signal transmission characteristics of a signal transmission line, comprising:

determining a value of a parasitic element, be it a capacitive or an inductive parasitic element, that exists at a portion of a signal transmission line which has an impedance;

calculating a delay associated with a correction impedance of a correction transmission line that, based at least in part on the parasitic element value and the correction impedance of the correction transmission line, is operative to increase the signal transmission line impedance if the parasitic element is capacitive and to decrease the signal transmission line impedance if the parasitic element is inductive;

equally dividing the correction transmission line into two halves; and

adding the two halves of the correction transmission line to the portion of the signal transmission line at which the parasitic element exists, wherein one half is added before and the other half is added after the parasitic element.

Claim 8 (original):

A method for enhancing the signal transmission characteristics of a signal transmission line, comprising:

determining an intrinsic capacitance of a parasitic element that exists at a discontinuity portion of a signal transmission line which has an impedance;

calculating a delay associated with a correction impedance that, based at least in part on the intrinsic capacitance and the correction impedance, is operative to increase the signal transmission line impedance; and

adding the correction impedance to the signal transmission line so that one half of the calculated delay is added before and the other half of the calculated delay is added after the portion of the signal transmission line at which the parasitic element exists.

Claim 9 (original):

A method for enhancing the signal transmission characteristics of a signal transmission line, comprising:

determining an intrinsic inductance of a parasitic element that exists at a discontinuity portion of a signal transmission line which has an impedance;

calculating a delay associated with a correction impedance that, based at least in part on the intrinsic inductance and the correction impedance, is operative to decrease the signal transmission line impedance; and

adding the correction impedance to the signal transmission line so that one half of the calculated delay is added before and the other half of the calculated delay is added after the portion of the signal transmission line at which the parasitic element exists.

Claim 10 (original):

The method of claim 8, wherein the correction impedance comprises an inductance that is placed before and after the parasitic element.

Claims 11-15 (previously cancelled)

Claim 16 (cancelled):

Claim 17 (original):

The method of claim 10 wherein the inductance is added by changing the width of the signal transmission line.

Claim 18 (original):

The method of claim 8 wherein the correction impedance is added by changing the width of the signal transmission line.